



Marlene H. Dortch, Secretary  
Office of the Secretary  
Federal Communications Commission  
445 12th Street, SW, Room TW-A325  
Washington, DC 20554

RE: Comment on GN Docket No. 16-46

Dear Secretary Dortch:

The National Federation of the Blind, the nation's oldest and largest organization of blind Americans, is pleased to see the Federal Communications Commission's ("the Commission") commitment to ensuring the accessibility of medical information for all Americans. We submit these comments to stress the importance of accessibility for people with disabilities, and to encourage the Commission to continue its efforts in this critically necessary endeavor. This work is of the utmost importance for disabled Americans who live in the country's rural areas, where easily accessible public transportation is rare.

An estimated 7.297 million people living in the United States have some form of visual disability<sup>1</sup>. In 2016, the United States Census Bureau reported that 19.3 percent of the American population lived in rural areas<sup>2</sup>. Applying that same percentage to the number of blind Americans, we estimate that there are more than 1.4 million blind people living in rural America. It is for these individuals, and the countless others living with disabilities in rural areas, that accessible broadband-enabled health technology is an absolute necessity. In these cases, it is no simple matter to travel one, two, or sometimes even three towns over in order visit a physician when a problem arises. Modern, innovative technology has the potential to make it easier than ever for Americans in these areas to address medical issues with their doctors through the use of the Internet and broadband-enabled health technology. However, all of that means nothing if blind Americans are unable to benefit from these potentially life-saving innovations. For this reason, the National Federation of the Blind implores the Commission to stay committed to ensuring that these technologies are just as accessible and user friendly for the blind as they are for everyone else.

In general, making web content accessible is not difficult to accomplish, particularly when reliable guidelines for doing so have existed for nearly two decades in the form of the Web Content Accessibility Guidelines (WCAG)<sup>3</sup>. The National Federation of the Blind has advocated for years to incorporate WCAG into digital information accessibility policy, and we urge the Commission to do the same. In the event that the Commission is hesitant to use the guidelines in full, then we strongly urge

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<sup>1</sup> U.S. Census Bureau, American Community Survey, The number of non-institutionalized, male or female, all ages, all races, regardless of ethnicity, with all education levels in the United States reported a visual disability in 2015 (2015).

<sup>2</sup> U.S. Census Bureau, New Census Data Show Differences between Urban and Rural Populations, Release Number: CB16-210 (2016).

<sup>3</sup> Web Content Accessibility Guidelines (WCAG) 1.0 were released on May 5, 1999.

that the principles contained within the guidelines be used as a firm foundation to create an even more robust set of standards for broadband-enabled health technology.

At the National Federation of the Blind, we see great potential for the field of technology in which the Commission is encouraging development. We also see an unprecedented amount of potential benefits for our members and members of other disability groups, but those benefits can only be realized if all Americans, including those with disabilities, are able to use that technology. We cannot stress enough the absolute necessity of ensuring accessibility for all when it comes to such important technology as this, and strongly encourage the Commission to maintain this emphasis on accessibility throughout the entire development process. The Commission should use the full extent of its authority to require equal access in these services and the devices used to facilitate broadband and healthcare.

The Commission's request for comment is comprised of forty-three questions with four specific to people with disabilities. Of the four disability related questions, one is solely related to ASL and the deaf. The three remaining questions and our responses are listed below.

Question 30: How are broadband-enabled health technologies and medical devices currently being used by people with disabilities? To what extent can these technologies and devices address the health care needs of people with disabilities in the future? Provide specific examples of the existing barriers, if any, that these technologies and devices pose for people with disabilities.

*Response: In much the same way they are being used to help others—one of our members has a CPAP machine. His nightly readings are sent to the equipment provider and monitored, and he can attest to this because he once removed the modem for travel, forgot to reconnect it, and within a week was contacted.*

*Entirely too many medical devices simply are not accessible. One of the ways that a broadband connection might help is to have the machine transmit data which it does not make available non-visually to someone who can monitor it. Presumably that someone will be in contact with blind patients. This is an inferior method of providing accessibility, but it is far better than nothing.*

Question 31: We seek comment on whether the design and development of broadband-enabled health services and technologies, as well as cutting-edge health and medical devices and applications, are accessible to, and usable by, people with disabilities. Are there practical concerns or other issues that are inhibiting or limiting the use and availability of broadband-enabled health services and technologies for people with disabilities? How are hospitals and clinicians currently addressing, if at all, any of these issues? An increasing number of health care services provide patient portals for patients to access medical records and communicate with physicians and specialists. What measures are taken to ensure that these mechanisms are fully accessible to users with disabilities (e.g., accessible via screen readers used by individuals who are blind)?

*Response: We receive reports of many devices that are not accessible—everything from home heart monitors to glucose monitoring systems or insulin pumps. If the data not provided non-visually could be provided through a wireless broadband connection, then some other device that is adapted to speak might make the device readable (a smart phone that talks or interfaces with a Braille display).*

*In response to the second part of this question, regarding practical concerns, the affordability of a broadband connection is assumed and this assumption may be incorrect.*

*Many of our members see no aggressive outreach to make certain that patient portals conform to web accessibility guidelines, and as a result these portals are not usable by people who use assistive technology such as screen readers. The industry seems to believe that blind and otherwise disabled people will have caretakers who will handle appointment management and the evaluation of health-related data. While this supposition is incorrect, the failure to provide accessibility may actually affirm the supposition because it will be the only way blind people have access to relevant information and the ability to make appointments. Many blind individuals would rather not use family members as care attendants, but may be forced to do so if it is the only feasible way to review test results provided after a doctor visit. Relatives may gladly help with transportation to a doctor appointment but feel overwhelmed at having to use an iPad to check their blind family member in. The applications assigned to tablets should be evaluated for accessibility, but even under the best of circumstances it may be that the learning curve is too steep and the use of the systems too infrequent for them to be learned by patients who, by virtue of needing medical care, may not be in a positive frame of mind when it comes to learning.*

Question 33: We seek suggestions as to how the Commission can effectively raise awareness among people with disabilities about the value proposition of broadband in health? How can the Commission help to enable the adoption and accessibility of such services and technologies among people with disabilities, especially given our authority?

*Response: Making people with disabilities more aware of services that can be provided through broadband Internet connections is crucial only if those services are accessible. Assuming that the solution is fully accessible to blind people, the National Federation of the Blind would use all of its communications outlets to make blind Americans aware of this initiative. This includes social media, listservs, publications, blogs, and podcasts. Given the lack of options currently available to blind people, we anticipate the news of a new accessible solution would spread rapidly.*

The National Federation of the Blind appreciates the opportunity to comment on these questions, and looks forward to working with the Commission on this and other disability issues.

Sincerely,

A handwritten signature in black ink, appearing to read "Mark A. Riccobono", with a stylized flourish at the end.

Mark A. Riccobono, President  
National Federation of the Blind